



OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS 66720 - PHONE (316) 431-2650

April 5, 1979

Montgomery County Crude Producers
300 W. Main
Cherryvale, Kansas 67335

Gentlemen:

Enclosed herewith are the results of tests run on the rotary core taken from the Markle Lease, Well No. 1, Montgomery County, Kansas, and submitted to our laboratory on April 2, 1979.

The core was sampled and sealed in plastic bags by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Benjamin R. Pearman
Benjamin R. Pearman

BRP:km
5 c to Cherryvale, Kansas

- REGISTERED ENGINEERS -

CORE ANALYSIS - WATER ANALYSIS - REPRESSURING ENGINEERING - SURVEYING & MAPPING - PROPERTY EVALUATION & OPERATION

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GENERAL INFORMATION & SUMMARY

Company Montgomery County
Crude Producers Lease Markle Well No. 1

Location 495' EWL & 495' NSL NE SE

Section 31 Twp. 31S Rge. 17E County Montgomery State Kansas

Name of Sand	-	Bartlesville
Top of Core	-	717.0
Bottom of Core	-	787.0
Top of Sand	-	717.0
Bottom of Sand	-	726.8
Total Feet of Permeable Sand	-	9.8
Total Feet of Floodable Sand	-	

Distribution of Permeable Sand:
 Permeability Range
 Millidarcys

	Feet	Cum. Ft.
0 - 3.4	1.8	1.8
11 - 20.	3.0	4.8
20 - 35.	5.0	9.8

Average Permeability Millidarcys	-	18.6
Average Percent Porosity	-	15.4
Average Percent Oil Saturation	-	31.9
Average Percent Water Saturation	-	51.4
Average Oil Content, Bbls./A. Ft.	-	378.
Total Oil Content, Bbls./Acre	-	3,700.
Average Percent Oil Recovery by Laboratory Flooding Tests	-	
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	-	
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	-	
Total Calculated Oil Recovery, Bbls./Acre	-	
Packer Setting, Feet	-	
Viscosity, Centipoises @	-	
A. P. I. Gravity, degrees @ 60 °F	-	
Elevation, Feet	-	

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LOG

Company Montgomery County Crude Producers Lease Markle Well No. 1

<u>Depth Interval, Feet</u>	<u>Description</u>
717.0 - 723.8	Light brown slightly shaly sandstone.
723.8 - 725.0	Grayish light brown shaly sandstone.
725.0 - 726.2	Light brown slightly shaly sandstone.
726.2 - 726.8	Dark carbonaceous sandstone.
726.8 - 727.2	Gray slightly sandy shale.
784.0 - 784.6	Black shale.
784.6 - 787.0	Gray shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Montgomery County Crude Producers Lease Markle Well No. 1

Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content Bbls. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water	Total			Ft.	Cum. Ft.		
1	717.4	15.2	25	58	83	295	26.	1.0	1.0	295	26.00
2	718.5	15.6	26	59	85	315	26.	1.0	2.0	315	26.00
3	719.6	17.0	29	52	81	383	35.	1.0	3.0	383	35.00
4	720.5	14.8	44	42	86	505	24.	1.0	4.0	505	24.00
5	721.5	15.4	32	52	84	382	26.	1.0	5.0	382	26.00
6	722.5	15.7	23	56	79	280	13.	1.0	6.0	280	13.00
7	723.6	14.1	33	56	89	361	19.	0.8	6.8	289	15.20
8	724.3	14.9	28	52	80	324	3.4	1.2	8.0	389	4.08
9	725.5	15.4	35	49	84	418	11.	1.2	9.2	501	13.20
10	726.5	14.9	52	30	82	601	0.16	0.6	9.8	361	0.10

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company	Montgomery County Crude Producers	Lease	Markle	Well No.	1
Depth Interval, Feet	Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Total Oil Content Bbls./Acre
717.0 - 726.8	717.0 - 726.8	9.8	18.6	182.58	3,700
717.0 - 726.8	717.0 - 726.8	9.8	51.4	378	3,700
			Average Percent Saturation	Average Oil Content Bbl./A. Ft.	
			31.9	378	
			15.4	378	
			9.8	378	